

AMENDMENTS TO THE CLAIMS

Claims 1-49 (cancelled).

Claim 50 (currently amended). A transfected lineage negative hematopoietic stem cell population comprising ~~a stem cell population of claim 1~~ endothelial progenitor cells in which at least about 50% of the cells include the cell markers CD31 and c-kit, wherein the cells of the stem cell population are transfected with a gene encoding a therapeutically useful an anti-angiogenic peptide.

Claim 51 (cancelled).

Claim 52 (currently amended). The transfected stem cell population of ~~claim 51~~ claim 50 wherein the anti-angiogenic peptide is a protein fragment.

Claim 53 (original). The transfected stem cell population of claim 52 wherein the protein fragment is an anti-angiogenic fragment of TrpRS.

Claim 54 (original). The transfected stem cell population of claim 53 wherein the fragment of TrpRS is T2-TrpRS.

Claim 55 (currently amended). A method of inhibiting retinal angiogenesis in the eye of a ~~patient in need of retinal angiogenesis inhibition~~ mammal comprising intravitreally injecting into the eye of the mammal a transfected stem cell population according to claim 49 into the eye of the patient comprising endothelial progenitor cells in which at least about 50% of the cells include the cell markers CD31 and c-kit, wherein the cells of the stem cell population are transfected with a gene encoding an anti-angiogenic peptide.

Claim 56 (currently amended). The method of claim 55 wherein the transfected lineage negative hematopoietic stem cell population is prepared by the steps of:

- (a) extracting bone marrow from a mammal;
- (b) separating a plurality of monocytes from the bone marrow;
- (c) labeling the plurality of monocytes with biotin conjugated lineage panel antibodies to CD45, CD3, Ly-6G, CD11 and TER-119; ~~and~~

(d) removing monocytes that were lineage positive for CD45, CD3, Ly-6G, CD11 and TER-119 from the plurality of monocytes to provide a population of lineage negative hematopoietic stem cells including endothelial progenitor cells; and

(e) transfecting the population of hematopoietic stem cells provided in step (d) with a gene that operably encodes an antiangiogenic peptide.

Claim 57 (cancelled).

Claim 58 (currently amended). A method of delivering transgenes to the retinal vasculature of a patient mammal comprising intravitreally injecting a transfected lineage negative hematopoietic stem cell population derived from bone marrow into the eye of the patient mammal, wherein the stem cell population ~~has been transfected with a therapeutically useful gene~~ comprises endothelial progenitor cells in which at least about 50% of the cells include the cell markers CD31 and c-kit, wherein the cells of the stem cell population are transfected with a gene that operably encodes an antiangiogenic peptide.

Claim 59 (original). The method of claim 58 wherein the transfected lineage negative hematopoietic stem cell is prepared by the steps of:

- (a) extracting bone marrow from a mammal;
- (b) separating a plurality of monocytes from the bone marrow;
- (c) labeling the plurality of monocytes with biotin conjugated lineage panel antibodies to CD45, CD3, Ly-6G, CD11 and TER-119; ~~and~~
- (d) removing monocytes that were lineage positive for CD45, CD3, Ly-6G, CD11 and TER-119 from the plurality of monocytes to provide a population of lineage negative hematopoietic stem cells including endothelial progenitor cells; and
- (e) transfecting the population of hematopoietic stem cells provided in step (d) with a gene that operably encodes an antiangiogenic peptide.

Claim 60 (cancelled).

Claim 61 (original). The method of claim 58 wherein the gene is useful for inhibiting retinal neovascularization.

Claims 62-65 (cancelled).